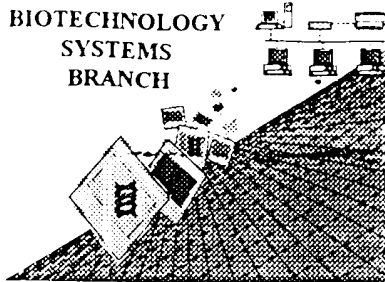




## **RAW SEQUENCE LISTING** **ERROR REPORT**

BIOTECHNOLOGY  
SYSTEMS  
BRANCH



0500

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/670,756

Source: OIPE

Date Processed by STIC: 10/4/2000

COPY

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: [patin30help@uspto.gov](mailto:patin30help@uspto.gov) or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER VERSION 3.0 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

### **Checker Version 3.0**

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 - 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard 8.1.

Checker Version 3.0 replaces the previous DOS-based version of Checker and is a 32-bit application.

Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO).

Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be downloaded from the USPTO website at the following address:

<http://www.uspto.gov/web/offices/pac/checker>

# Raw Sequence Listing Error Summary

## ERROR DETECTED SUGGESTED CORRECTION

SERIAL NUMBER: 09/670,756

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1        Wrapped Nucleics      The number/text at the end of each line "wrapped" down to the next line.  
This may occur if your file was retrieved in a word processor after creating it.  
Please adjust your right margin to .3, as this will prevent "wrapping".
- 2        Wrapped Aminos      The amino acid number/text at the end of each line "wrapped" down to the next line.  
This may occur if your file was retrieved in a word processor after creating it.  
Please adjust your right margin to .3, as this will prevent "wrapping".
- 3        Incorrect Line Length      The rules require that a line not exceed 72 characters in length. This includes spaces.
- 4        Misaligned Amino Acid      The numbering under each 5th amino acid is misaligned. This may be caused by the use of tabs  
Numbering      between the numbering. It is recommended to delete any tabs and use spacing between the numbers.
- 5        Non-ASCII      This file was not saved in ASCII (DOS) text, as required by the Sequence Rules.  
Please ensure your subsequent submission is saved in ASCII text so that it can be processed.
- 6        Variable Length      Sequence(s)        contain n's or Xaa's which represented more than one residue.  
As per the rules, each n or Xaa can only represent a single residue.  
Please present the maximum number of each residue having variable length and  
indicate in the (ix) feature section that some may be missing.
- 7        PatentIn ver. 2.0 "bug"      A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid  
sequence(s)       . Normally, PatentIn would automatically generate this section from the  
previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section  
to the subsequent amino acid sequence. This applies primarily to the mandatory <220>-<223>  
sections for Artificial or Unknown sequences.
- 8        Skipped Sequences      Sequence(s)        missing. If intentional, please use the following format for each skipped sequence  
(OLD RULES)      (2) INFORMATION FOR SEQ ID NO:X:  
(i) SEQUENCE CHARACTERISTICS:(Do not insert any headings under "SEQUENCE CHARACTERISTICS")  
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X:  
This sequence is intentionally skipped  
  
Please also adjust the "(iii) NUMBER OF SEQUENCES:" response to include the skipped sequence(s).
- 9        Skipped Sequences      Sequence(s)        missing. If intentional, please use the following format for each skipped sequence  
(NEW RULES)      <210> sequence id number  
                                 <400> sequence id number  
                                 000
- 10        Use of n's or Xaa's      Use of n's and/or Xaa's have been detected in the Sequence Listing  
(NEW RULES)      Use of <220> to <223> is MANDATORY if n's or Xaa's are present.  
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 11        Use of <213>Organism      Sequence(s)        are missing this mandatory field or its response  
(NEW RULES)
- 12        Use of <220>Feature      Sequence(s)        are missing this mandatory field or its response.  
(NEW RULES)      Use of <220> to <223> is MANDATORY if <213>ORGANISM is "Artificial" or "Unknown".  
Please explain source of genetic material in <220> to <223> section.  
(See "Federal Register," 6/01/98, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of new Rules)
- 13        PatentIn ver. 2.0 "bug"      Please do not use "Copy to Disk" function of PatentIn version 2.0. It does not copy the  
file to the hard drive, but only to a temporary file. Please use the "File Manager" or any other means to copy file to floppy disk.

OIPE

P.6

## RAW SEQUENCE LISTING

PATENT APPLICATION US/09/670,756

DATE 10/04/2000

TIME 22:10:51

Input Set: A: seqlist.txt

Output Set: N: CRF3\10042000\I670756.raw

Does Not Comply  
Corrected Diskette Needed

3 <110> APPLICANT: Rhodes, Kenneth  
 4 Betty, Maria  
 5 Ling, Huai-Ping  
 6 An, Wenqian  
 8 <120> TITLE OF INVENTION: POTASSIUM CHANNEL INTERACTORS AND USES THEREFOR  
 10 <130> FILE REFERENCE: MNI-970CP1  
 12 <140> CURRENT APPLICATION NUMBER: US/09/670,756  
 13 <141> CURRENT FILING DATE: 2000-09-27  
 15 <150> PRIOR APPLICATION NUMBER: USSN 60/110,207  
 16 <151> PRIOR FILING DATE: 1998-11-30  
 18 <150> PRIOR APPLICATION NUMBER: USSN 60/110,033  
 19 <151> PRIOR FILING DATE: 1998-11-25  
 21 <150> PRIOR APPLICATION NUMBER: USSN 60/109,333  
 22 <151> PRIOR FILING DATE: 1998-11-20  
 24 <150> PRIOR APPLICATION NUMBER: USSN 09,298,731  
 25 <151> PRIOR FILING DATE: 1999-04-23  
 27 <150> PRIOR APPLICATION NUMBER: USSN 09,350,614  
 28 <151> PRIOR FILING DATE: 1999-07-09  
 30 <150> PRIOR APPLICATION NUMBER: USSN 09,350,874  
 31 <151> PRIOR FILING DATE: 1999-07-09  
 33 <150> PRIOR APPLICATION NUMBER: USSN 09,400,492  
 34 <151> PRIOR FILING DATE: 1999-09-21  
 36 <150> PRIOR APPLICATION NUMBER: USSN 09,399,913  
 37 <151> PRIOR FILING DATE: 1999-09-21  
 39 <150> PRIOR APPLICATION NUMBER: PCT/US99/27428  
 40 <151> PRIOR FILING DATE: 1999-11-19  
 43 <160> NUMBER OF SEQ ID NOS: 3  
 45 <170> SOFTWARE: PatentIn Ver. 2.0  
 47 <210> SEQ ID NO: 1  
 48 <211> LENGTH: 1463  
 49 <212> TYPE: DNA  
 50 <213> ORGANISM: Homo sapiens  
 52 <220> FEATURE:  
 53 <221> NAME/KEY: CDS  
 54 <222> LOCATION: (225) ..(872)  
 56 <400> SEQUENCE: 1  
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 60 gccctctagc ctgcctccca cgtttg taa ataccaaact gcaggcagag tgcggggcgc 120  
 62 tttttctccc tccaattcag agtaga-aaa ccacggggat ttctttccaa ggtaggggag 180  
 64 gggcggggcc cgggggtccc actcgcctc aattcttgcg tccc atg ggg gcc gtc 234  
 65 Met Gly Ala Val  
 66 1  
 68 atg ggc acc ttc tca tct ctg aaa acc aaa gaa agg cga ccc tgg aaa 284  
 69 Met Gly Thr Phe Ser Ser Leu Gln Thr Lys Gln Arg Arg Pro Ser Lys  
 70 5 13 15 20  
 72 gat aag att gaa gat gaa ctg gag atg acc atg gtt tgc cat cgg ccc 332  
 73 Asp Lys Ile Glu Asp Glu Leu Gln Met Thr Met Val Cys His Arg Pro

## RAW SEQUENCE LISTING

PATENT APPLICATION US/09/670,756

DATE: 10/04/2000

TIME: 22:17:51

Input Set : A:\seqlist.txt

Output Set: N:\CRF3\10042000\I670756.raw

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74          25          30          35
76 gaa gta ctg gag cag ctg gag gcc cag aac aac ttc acc aag aag gag 380
77 Glu Gly Leu Glu Gln Ala Gln Thr Asn Phe Thr Lys Arg Glu
78          40          45          50
80 ctg cag gtc ctt tat gga ggc ttc aaa aat gag tgc ccc agt ggt gtg 428
81 Leu Gln Val Leu Tyr Arg Gly Phe Lys Asn Glu Cys Pro Ser Gly Val
82          55          60          65
84 gtc aac gaa gac aca ttc aag cag atc tat gct cag ttt ttc cct cat 476
85 Val Asn Glu Asp Thr Phe Lys Gln Ile Tyr Ala Gln Phe Phe Pro His
86          70          75          80
88 gga gat gcc agc acg tat gcc cat tac ctc ttc aat gcc ttc gac acc 524
89 Gly Asp Ala Ser Thr Tyr Ala His Tyr Leu Phe Asn Ala Phe Asp Thr
90          85          90          95          100
92 act cag aca ggc tcc gtg aag ttc gag gac ttt gta acc gct ctg tcy 572
93 Thr Gln Thr Gly Ser Val Lys Phe Glu Asp Phe Val Thr Ala Leu Ser
94          105          110          115
96 att tta ttg aga gga act gtc cac gag aaa cta aag tgg aca ttt aat 620
97 Ile Leu Leu Arg Gly Thr Val His Glu Lys Leu Arg Trp Thr Phe Asn
98          120          125          130
100 ttg tat gac atg acc aag gac gga tac ata aac aat gaa gag atg atg 668
101 Leu Tyr Asp Ile Asn Lys Asp Gly Tyr Ile Asn Lys Glu Met Met
102          135          140          145
104 gac att gtc aaa gcc atc tat gac atg atg ggg aaa tac aca tat cct 716
105 Asp Ile Val Lys Ala Ile Tyr Asp Met Met Gly Lys Tyr Thr Tyr Pro
106          150          155          160
108 gtg ctc aaa gag gac act cca agg cag cat gtg gac gtc ttc ttc cag 764
109 Val Leu Lys Glu Asp Thr Pro Arg Gln His Val Asp Val Phe Phe Gln
110          165          170          175          180
112 aaa atg gac aaa aat aaa gat gcc atc gta act tta gat gaa ttt ctt 812
113 Lys Met Asp Lys Asn Lys Asp Gly Ile Val Thr Leu Asp Glu Phe Leu
114          185          190          195
116 gaa tca tgc cag gag gac gac aac atc atg agg tct ctc cag ctg ttt 860
117 Glu Ser Cys Gln Glu Asp Asp Asn Ile Met Arg Ser Leu Gln Leu Phe
118          200          205          210
120 aaa aat gtc atg taactggtga cactcagcca ttcagctctc agagacattg 912
121 Gln Asn Val Met
122          215
124 tactaaacaa ccaccttaac accctgatct gcccttggtc tgattttaca caccaactct 972
126 tgggacagaa acacctttta cacttttgaa gaattctctg ctgaagactt tcttatggaa 1032
128 cccagcatca tgtggctcag tctctgattg ccaactcttc ctctttcttc ttcttgagag 1092
130 agacaagatg aaatttgagt ttgttttgga agcatgctca tctctcaca ctgctgccct 1152
132 atggaaggtc cctctgctta agcttaacaa gtagtgcaaa aaatatgtcg cttacgtgcc 1212
134 cccagcccac tgcctccaag tcaggcagac cttggtgaat ctggaagcaa gaggacctga 1272
136 gccagatgca caccatctct gatggcctcc caaaccaatg tgccctgttc tcttcctttg 1332
138 gtgggaagaa tgagagttat ccagaacaat taagatctgt catgaccaga ttgggagagc 1392
140 cagcacctaa catatgtggg ataggactga attattaagc atgacattgt ctgatgaccc 1452
142 aaactgcccc g
145 <210> SEQ ID NO: 2
146 <211> LENGTH: 216

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RAW SEQUENCE LISTING  
 PATENT APPLICATION US/09/670,756  
 DATE: 10/04/2000  
 TIME: 22:17:54

Input Set: A:\seqlist.txt  
 Output Set: N:\CRF3\10042000\I670756.raw

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147 <212> TYPE: PRT
148 <213> ORGANISM: Homo sapiens
150 <400> SEQUENCE: 2
151 Met Gly Ala Val Met Gly Thr Phe Ser Ser Leu Gln Thr Lys Gln Arg
152 1 5 10 15
154 Arg Pro Ser Lys Asp Lys Ile Glu Asp Glu Leu Glu Met Thr Met Val
155 20 25 30
157 Cys His Arg Pro Glu Gly Leu Glu Gln Leu Glu Ala Gln Thr Asn Phe
158 35 40 45
160 Thr Lys Arg Glu Leu Gln Val Leu Tyr Arg Gly Phe Lys Asn Glu Cys
161 50 55 60
163 Pro Ser Gly Val Val Asn Glu Asp Thr Phe Lys Gln Ile Tyr Ala Gln
164 65 70 75 80
166 Phe Phe Pro His Gly Asp Ala Ser Thr Thr Ala His Tyr Leu Phe Asn
167 85 90 95
169 Ala Phe Asp Thr Thr Gln Thr Gly Ser Val Lys Phe Glu Asp Phe Val
170 100 105 110
172 Thr Ala Leu Ser Ile Leu Leu Arg Gly Thr Val His Glu Lys Leu Arg
173 115 120 125
176 Trp Thr Phe Asn Leu Tyr Asp Ile Asn Lys Asp Gly Tyr Ile Asn Lys
177 130 135 140
179 Glu Glu Met Met Asp Ile Val Lys Ala Ile Tyr Asp Met Met Gly Lys
180 145 150 155 160
182 Tyr Thr Tyr Pro Val Leu Lys Glu Asp Thr Pro Arg Gln His Val Asp
183 165 170 175
185 Val Phe Phe Gln Lys Met Asp Lys Asn Lys Asp Gly Ile Val Thr Leu
186 180 185 190
188 Asp Glu Phe Leu Glu Ser Cys Gln Glu Asp Asp Asn Ile Met Arg Ser
189 195 200 205
191 Leu Gln Leu Phe Gln Asn Val Met
192 210 215
195 <210> SEQ ID NO: 3
196 <211> LENGTH: 1856
197 <212> TYPE: DNA
198 <213> ORGANISM: Rattus sp.
200 <220> FEATURE:
201 <221> NAME/KEY: CDS
202 <222> LOCATION: (300)..(1034)
204 <400> SEQUENCE: 3
205 ggacacacaac ccctggattc ttccggagaat atgccgtgag gtgttgccaa ttattagttc 60
207 tcttggttag cagatgttta gggactgggt aagcctttgg agaaattacc ttaggaaaac 120
209 ggggaaataa aagcaagat taccatgaat tgcaagatta cctagcaatt gcaaggtagg 180
211 aggagagagg tggaggggcg agtagacagg agggaggagg aaagttagag gaagctaggg 240
213 tgggtggaat aacctggcac ttggaacagc ggcaaaagaag cgcgattttc cagcttttaa 299
215 atg cct gcc cgc gtt ctg ctt gcc tac cgc gga acg gag ata ttg acc 347
216 Met Pro Ala Arg Val Leu Leu Ala Tyr Pro Gly Thr Glu Met Leu Thr
217 1 5 10 15
219 caa ggc gag tct gaa ggg ctc cag acc ttg ggg ata gta ata gtc ctg 395
220 Gln Gly Glu Ser Glu Gly Leu Gln Thr Leu Gly Ile Val Val Val Leu

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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/670,756

DATE: 10/04/2000

TIME: 22:17:54

Input Set : A:\seqlist.txt

Output Set: N:\CRF3\10042000\I670756.raw

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221          20          25          30
222 tgt tcc tct ctg aaa cta ctg cac tac ctc ggg ctg att gac ttg tca 143
223 Cys Ser Ser Leu Lys Leu Leu His Tyr Leu Gly Leu Ile Asp Leu Ser
225          35          40          45
227 gat gac aag atc gag gat gat ctg gag atg acc atg gtt tgc cat cga 151
228 Asp Asp Lys Ile Glu Asp Asp Leu Glu Met Thr Met Val Cys His Arg
229          50          55          60
233 cct gag gga ctg gag cag ctt gag gca caa acg aac ttc acc aag aga 159
234 Pro Glu Gly Leu Glu Gln Leu Glu Ala Gln Thr Asn Phe Thr Lys Arg
235          65          70          75          80
237 gaa ctg caa gtc ctt tac cgg gga ttc aaa aac gag tgc ccc agt ggt 167
238 Glu Leu Gln Val Leu Tyr Arg Gly Phe Lys Asn Glu Cys Pro Ser Gly
239          85          90          95
241 gtg gtt aac gaa gag acc ttc aag cag atc tac gct cag ttt ttc cct 175
242 Val Val Asn Glu Thr Phe Lys Gln Ile Tyr Ala Gln Phe Phe Pro
243          100          105          110
245 cat gga gat gcc agc aca tac gca cat tac ctc ttc aat gcc ttc gac 183
246 His Gly Asp Ala Ser Thr Tyr Ala His Tyr Leu Phe Asn Ala Phe Asp
247          115          120          125
249 acc acc cag aca gcc tct gta aag ttc gag gac ttt gtg act gct ctg 191
250 Thr Thr Gln Thr Gly Ser Val Lys Phe Glu Asp Phe Val Thr Ala Leu
251          130          135          140
253 tcg att tta ctg aca gga acg gtc cat gaa aaa ctg agg tgg acg ttt 199
254 Ser Ile Leu Leu Arg Gly Thr Val His Glu Lys Leu Arg Trp Thr Phe
255          145          150          155          160
257 aat ttg tac gac atc aat aaa gac gcc tac ata aac aaa gag gag atg 207
258 Asn Leu Tyr Asp Ile Asn Lys Asp Gly Tyr Ile Asn Lys Glu Glu Met
259          165          170          175
261 atg gac ata gtg aaa gcc atc tat gac atg atg ggg aaa tac acc tat 215
262 Met Asp Ile Val Lys Ala Ile Tyr Asp Met Met Gly Lys Tyr Thr Tyr
263          180          185          190
265 cct gtg ctc aaa gag gac act ccc agg cag cac gtg gac gtc ttc ttc 223
266 Pro Val Leu Lys Glu Asp Thr Pro Arg Gln His Val Asp Val Phe Phe
267          195          200          205
269 cag aaa atg gat aaa aat aaa gat gcc att gta acg tta gac gaa ttt 231
270 Gln Lys Met Asp Lys Asn Lys Asp Gly Ile Val Thr Leu Asp Glu Phe
271          210          215          220
273 ctc gag tcc tgt cag gag gat gac aac atc atg agg tct cta cag ctg 239
274 Leu Glu Ser Cys Gln Glu Asp Asp Asn Ile Met Arg Ser Leu Gln Leu
275          225          230          235          240
277 ttc caa aat gtc atg taactgagga cactggccat cctgctctca gagacactga 247
278 Phe Gln Asn Val Met
279          245
281 caaacacctc aatgccctga tctgcccttg ttccagtttt acacatcaac tctcgggaca 255
282 gaaataccct ttacactttg gaagaattct ctgctgaaqa cttctacaaa aacctggcac 263
283 cgaatggctc agtctctgat tgcdaactct tctcctctcc tctcttgaag aggaacgagc 271
284 tgaatccga agtttgtttt ggaagcatgc ccatctctcc atgctgctgc tgcctgttg 279
285 aaggccctc tgcctgagct taacacgtag tgcacagttt tctcgtata cagatcccca 287
286 actcactgcc tctaaagtac gcagaccctg atcaatctga accaaatgtg caccatccct 295

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## RAW SEQUENCE LISTING

PATENT APPLICATION US/09/670,756

DATE: 10/04/2000

TIME: 22:17:54

Input Set : A:\seqlist.txt

Output Set: N:\CRF3\10042000\I670756.raw

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293 cgatggcctc ccaagccaat gtgctgctt ctcttctctt ggtgggaaga aagaacgctc 1494
295 tacagagcac ttagagctta caatgaaaat actgggagag gcagcaccta acacatgtag 1554
297 aataggactg aattattaaag catggtggta tcagatgatg caaacagccc atgtcatttt 1614
299 tttttccaga ggtagggaact aataattctc ccacactagc acctacgata atagaacaaq 1674
301 tcttttaaca catccaggag ggaaccgctt gcccaatggt ctatcccttc tctccatccc 1734
303 ctgctcaagc ccagcactgc atgtctctcc cggaaggctc agaatgctg tgaatgctg 1794
305 taacttttat accctgttat aatcaataaa cagaactatt tcgtacaaaa aaaaaaaaaa 1854
307 aa 1856
310 <210> SEQ ID NO: 4
311 <211> LENGTH: 245
312 <212> TYPE: PRP
313 <213> ORGANISM: Rattus sp.
315 <100> SEQUENCE: 4
316 Met Pro Ala Arg Val Leu Leu Ala Tyr Pro Gly Thr Glu Met Leu Thr
317 1 5 10 15
319 Gln Gly Glu Ser Glu Gly Leu Gln Thr Leu Gly Ile Val Val Val Leu
320 20 25 30
322 Cys Ser Ser Leu Lys Leu Leu His Tyr Leu Gly Leu Ile Asp Leu Ser
323 35 40 45
325 Asp Asp Lys Ile Glu Asp Asp Leu Glu Met Thr Met Val Cys His Arg
326 50 55 60
328 Pro Glu Gly Leu Glu Gln Leu Glu Ala Gln Thr Asn Phe Thr Lys Arg
329 65 70 75 80
331 Glu Leu Gln Val Leu Tyr Arg Gly Phe Lys Asn Glu Cys Pro Ser Gly
332 85 90 95
334 Val Val Asn Glu Glu Thr Phe Lys Gln Ile Tyr Ala Gln Phe Phe Pro
335 100 105 110
337 His Gly Asp Ala Ser Thr Tyr Ala His Tyr Leu Phe Asn Ala Phe Asp
338 115 120 125
340 Thr Thr Gln Thr Gly Ser Val Lys Phe Glu Asp Phe Val Thr Ala Leu
341 130 135 140
343 Ser Ile Leu Leu Arg Gly Thr Val His Glu Lys Leu Arg Trp Thr Phe
344 145 150 155 160
347 Asn Leu Tyr Asp Ile Asn Lys Asp Gly Tyr Ile Asn Lys Glu Glu Met
348 165 170 175
350 Met Asp Ile Val Lys Ala Ile Tyr Asp Met Met Gly Lys Tyr Thr Tyr
351 180 185 190
353 Pro Val Leu Lys Glu Asp Thr Pro Arg Gln His Val Asp Val Phe Phe
354 195 200 205
356 Gln Lys Met Asp Lys Asn Lys Asp Gly Ile Val Thr Leu Asp Glu Phe
357 210 215 220
359 Leu Glu Ser Cys Gln Glu Asp Asp Asn Ile Met Arg Ser Leu Gln Leu
360 225 230 235 240
362 Phe Gln Asn Val Met
363 245
366 <210> SEQ ID NO: 5
367 <211> LENGTH: 1907
368 <212> TYPE: DNA
369 <213> ORGANISM: Mus musculus

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<210> 12  
 <211> 203  
 <212> PRT  
 <213> Rattus sp.

<400> 12

Met Leu Thr Gln Gly Glu Ser Glu Gly Leu Gln Thr Leu Gly Ile Val  
 1 5 10 15

Val Val Leu Cys Ser Ser Leu Lys Leu Leu His Tyr Leu Gly Leu Ile  
 20 25 30

Asp Leu Ser Asp Asp Lys Ile Glu Asp Asp Leu Glu Met Thr Met Val  
 35 40 45

Cys His Arg Pro Glu Gly Leu Glu Gln Leu Glu Ala Gln Thr Asn Phe  
 50 55 60

Thr Lys Arg Glu Leu Gln Val Leu Tyr Arg Gly Phe Lys Asn Glu Cys  
 65 70 75 80

Pro Ser Gly Val Val Asn Glu Glu Thr Phe Lys (Xaa) Ile Tyr Ala Gln  
 85 90 95

Phe Phe Pro His Gly Asp Ala Ser Thr Tyr Ala His Tyr Leu Phe Asn  
 100 105 110

Ala Phe Asp Thr Thr Gln Thr Gly Ser Val Lys Phe Glu Asp Phe Val  
 115 120 125

Thr Ala Leu Ser Ile Leu Leu Arg Gly Thr Val His Glu Lys Leu Lys  
 130 135 140

Trp Thr Phe Asn Leu Tyr Asp Ile Asn Lys Asp Gly Tyr Ile Asn Lys  
 145 150 155 160

Glu Glu Met Met Asp Ile Val Lys Ala Ile Tyr Asp Met Met Gly Lys  
 165 170 175

Tyr Thr Tyr Leu Val Leu Lys Glu Asp Thr Ser Arg Gln His Val Asp  
 180 185 190

Val Phe Phe Gln Lys Met Asp Lys Asn Lys Asp  
 195 200

mt

All item 10  
 on Error  
 Summary  
 Sheet

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.



VERIFICATION SUMMARY

PATENT APPLICATION US/09/670,756

DATE: 10/04/2000

TIME: 22:17:55

Input Set : A:\seqlist.txt

Output Set: N:\CRF3\10042000\I670756.raw

L:12 M:270 C: Current Application Number differs. Replaced Application Number  
 L:13 M:271 C: Current Filing Date differs. Replaced Current Filing Date  
 L:882 M:341 W: (46) "n" or "Xaa" used. for SEQ ID# 11  
 L:883 M:341 W: (46) "n" or "Xaa" used. for SEQ ID# 11  
 L:936 M:258 W: Mandatory Feature missing. <220> not found for SEQ ID#:12  
 L:936 M:258 W: Mandatory Feature missing. <221> not found for SEQ ID#:12  
 L:936 M:258 W: Mandatory Feature missing. <222> not found for SEQ ID#:12  
 L:936 M:258 W: Mandatory Feature missing. <223> not found for SEQ ID#:12  
 L:936 M:340 W: (46) "n" or "Xaa" used. Feature required for SEQ ID#:12  
 L:3028 M:341 W: (46) "n" or "Xaa" used. for SEQ ID#:37  
 L:3362 M:258 W: Mandatory Feature missing. <221> not found for SEQ ID#:43  
 L:3362 M:258 W: Mandatory Feature missing. <222> not found for SEQ ID#:43  
 L:3362 M:340 W: (46) "n" or "Xaa" used. Feature required. for SEQ ID#:43  
 L:3365 M:258 W: Mandatory Feature missing. <221> not found for SEQ ID#:43  
 L:3365 M:258 W: Mandatory Feature missing. <222> not found for SEQ ID#:43  
 M:340 Repeated in SeqNo=43